ANNUAL PROGRESS REPORT

1983 EXPERIMENTAL REVEGETATION PROGRAM

for

CARR FORK MINE

January 6, 1984

RECEIVED
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DIVISION OF
OIL, GAS & MINING

Health, Safety & Environment Dept.
Anaconda Minerals Company
555 Seventeenth Street
Denver, Colorado

1983 EXPERIMENTAL REVEGETATION PROGRAM
Annual Progress Report
CARR FORK MINE

I. Introduction

This annual progress report for the year 1983 was prepared to satisfy provisions of the mined land reclamation contract entered into August 20, 1980 by Anaconda Minerals Company, Carr Fork Mine, and the State of Utah, Department of Natural Resources, Division of Oil, Gas, and Mining.

During 1983, unusual, intense spring runoff and storm activity impacted the revegetation program in a number of ways. The Main Experimental Plot (MEP) 1 experienced severe sheet and rill erosion. A number of small gullies (6-8 inches in depth) were cut through the central portion of the plot. However, it should be noted that the vegetation within the plot seemed to hold the hillside and check erosion better than the areas surrounding the plot. Plot MEP 2 experienced only minor sheet erosion. The heavy runoff in the region also delayed the soil and vegetation survey until the first weeks of September, because the Soil Conservation Service (SCS) was busy with flood damage work.

The curtailment of activity at Carr Fork continued to effect the Experimental Revegetation Program in 1983; however, a number of tasks were completed which will ultimately lead to the development of a workable reclamation plan:

1) The SCS completed the Order 2 Soil Survey of the 3500 acre "core area" and a touchup Order 3 Survey on the remaining area (7500 acres).

2) The SCS completed a High Intensity Vegetation Inventory on the "core area" and a Rangeland Inventory on the remaining area.

3) A meeting was held October 20, 1983 with Anaconda Minerals Company, Carr Fork Mine, and the SCS to discuss the preliminary results of the soil and vegetation survey.

4) Observations on the revegetation plots and general planting areas were made on November 17, 1983 in order to assess the status of the experimental revegetation efforts. Photo documentation of the plots was also made at that time.

The results of the soil/vegetation survey and the revegetation plot evaluation are discussed below.

II. Results

A. Soil/Vegetation Survey - During the week of September 5,

1983, field data for the soil and vegetation survey at Carr Fork Mine were collected by the SCS. Darryl Trickler, Soil Survey Party Leader, and Scott Ferguson, Range Conservationist with the SCS, conducted the field inventory.

The survey area consisted of approximately 11,000 acres, with a "core area" of existing or potential disturbed lands comprising about 3500 acres. The area, in general, is classified as Upper Pine Canyon (elevation range 5800 feet - 6700 feet) and Lower Pine Canyon (elevation range 5000 feet - 5800 feet).

The Carr Fork Mine site lies within the mountain climatic zone. In this zone, the average annual precipitation ranges from 16 to 20 inches, the average annual temperature is 44 to 47 degrees F., the average freeze-free period is 100 to 120 days and elevations range from 5000 to 6200 feet. The three range sites in this climatic zone are Mountain Gravelly Loam (Oak), Mountain Stony Loam, and Mountain Loam (Shrub). Mine tailings and talus slopes, which are classifed as miscellaneous land types, also occur on the survey area.

A description of each of the different survey (writeup) areas follows. Soils data and range site descriptions are included. The range writeup forms and data from the SCS are contained in Appendix 1. Appendix 2 contains the

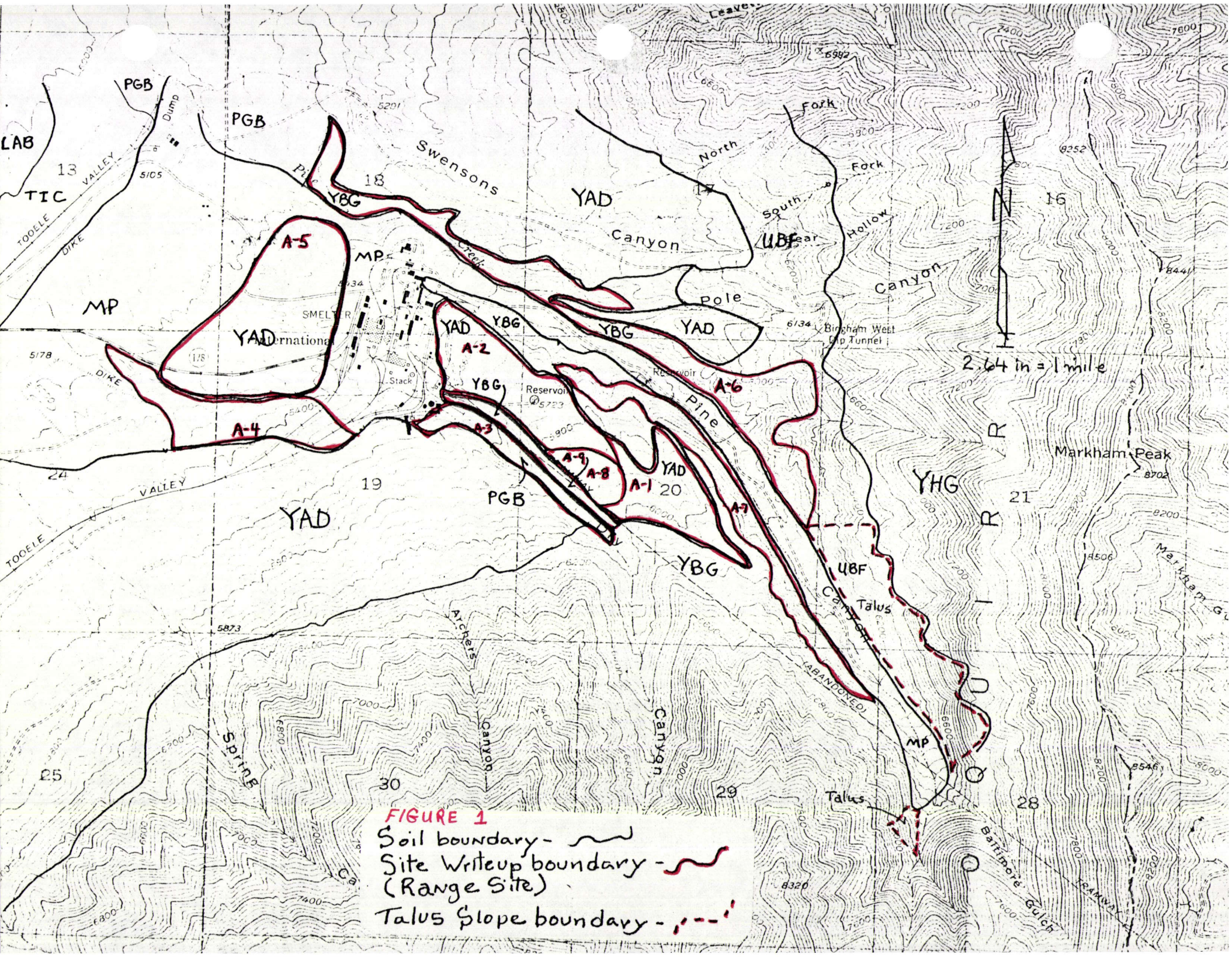


FIGURE 1

Soil boundary - ~~~

Site Writeup boundary - ~~~ (Range Site)

Talus Slope boundary - ,---,

plant species list for the survey area. A map (Figure 1) delineates the soils mapping units and range sites. All production weights for both potential and present vegetation are given in pounds per acre, air dry. It should be noted that all site writeup weights are representative of the above average precipitation received this year. Also, grasshopper impact was significant over much of the survey area. A summary of the range conditions for all sites is contained in Table 1. Table 2 summarizes the erosion conditons for each site.

1. Range Site: Mountain Gravelly Loam (Oak)

Soil: a. **Yeates Hollow gravelly loam (YAD mapping units) Site Writeups A-1, A-5, A-8**

Very deep, well drained, gently sloping Yeates Hollow gravelly loam soils are found in this site. These soils have a surface layer of gravelly loam, a subsoil of very gravelly clay loam, and substratum of extremely gravelly sandy loam. Slopes range from 5 to 15 percent. The average annual precipitation is 16 to 20 inches. The effective rooting depth is 60 inches or more.

b) **Yeates Hollow gravelly loam (steep phase) (YBG mapping units) Site Writeups A-6, A-9**

TABLE 1
RANGE CONDITION SUMMARY
CARR FORK MINE

Writeup Site #	Range Site Description	Soil Type	Soil Map Unit	Ecological Condition	Apparent Trend
A-1	Mountain Gravelly Loam (Oak)	Yeates Hollow gravelly loam	YAD	Fair	Improving
A-2	Mountain Gravelly Loam (Oak)	Yeates Hollow gravelly loam (eroded phase)	YAD	Poor	Declining
A-3	Mountain Stony Loam	Pleasant Grove gravelly loam	PGB	Poor	Static
A-4	Miscellaneous Land	Tailings	MP	- - -	Improving
A-5	Mountain Gravelly Loam (Oak)	Yeates Hollow gravelly loam	YAD	Poor	Static
A-6	Mountain Gravelly Loam (Oak)	Yeates Hollow gravelly loam (steep phase)	YBG	Poor	Declining
A-7	Mountain Loam (Shrub)	Yeates Hollow gravelly loam (steep north slope phase)	YBG	Fair to Poor (mostly Poor)	Improving
A-8	Mountain Gravelly Loam (Oak)	Yeates Hollow gravelly loam	YAD	Fair	Improving
A-9	Mountain Gravelly Loam (Oak)	Yeates Hollow gravelly loam (steep phase)	YBG	Poor	Declining
- - -	Miscellaneous Land	Talus Slopes	UBF	- - -	- - -

SOURCE: SCS, December 1983

TABLE 2

EROSION CONDITION SUMMARY

CARR FORK MINE

Writeup Site #	Erosion Potential (%)			Soil Loss (tons/Acre/Year)		
	Bare Ground	Surface Fragments	Ground Cover	Sheet & Rill	Gully	Wind
A-1	37	35	18	2.8	3.4	0
A-2	12	85	3	12.7	0	0
A-3	5	63	32	0.84	0	0
A-4	92	Trace	8	5.2	17.8	24.0
A-5	15	65	20	1.2	14.0	0
A-6	6	84	10	31.0	6.2	0
A-7	20	50	30	10.0	31.0	0
A-8	15	50	35	0.16	0	0
A-9	10	97	3	31.0	31.0	0

SOURCE: SCS, December 1983

Very deep, well drained, steep to very steep Yeates Hollow very cobbly loam soils are found in this site. These soils have a surface layer of very cobbly loam, a subsoil of very gravelly clay loam, and substratum of extremely gravelly sandy loam. Slopes range from 15 to 60 percent. The average annual precipitation is 16 to 20 inches. The effective rooting depth is 60 inches or more.

c) **Yeates Hollow gravelly loam (eroded phase) (YAD mapping unit) Site Writeup A-2**

Very deep, well drained, gently sloping Yeates Hollow very gravelly loam soils are found in this site. These soils have a surface layer of very gravelly loam, a subsoil of very gravelly clay loam, and substratum of extremely gravelly sandy loam. Slopes range from 5 to 15 percent. The average annual precipitation is 16 to 20 inches. The effective rooting depth is 60 inches or more.

The potential plant community consists of 45 percent grasses, 20 percent forbs, and 35 percent shrubs.

COMMON PLANT NAME	SYMBOL	PERCENTAGE
BEARDED WHEATGRASS	AGSU	10
BLUEBUNCH WHEATGRASS	AGSP	5
MOUNTAIN BROME	BRMA4	5
NEVADA BLUEGRASS	PONE3	5
OTHER PERENNIAL GRASSES	PPGG	20
ARROWLEAF BALSAMROOT	BASA3	5
GERANIUM	GERAN	5
HORSEMINT	AGUR	5
OTHER PERENNIAL FORBS	PPFF	20
BIRCHLEAF MOUNTAIN MAHOGANY	CEMO2	5
GAMBEL OAK	QUGA	10

FAVORABLE YEARS	2300
NORMAL YEARS	1900
UNFAVORABLE YEARS	1500

The ecological condition of the Mountain Gravelly Loam (Oak) sites ranged from fair with an improving trend to poor with a declining trend. Sites A-1 and A-8 were both rated to be in fair condition with an improving trend. Site A-1 had evidence of vegetative establishment on the bottoms and sides of rills present on site. Vegetative cover values for site A-8 were the highest for the entire survey area. It was noted that Kentucky bluegrass is becoming the dominant plant species on this site. The area of Site A-5 is in poor condition and is static. Sites A2, A-6, and A-9 were judged to be in poor condition with erosion resulting in a declining trend delineation for the areas. On site A-2 there is evidence of

active sheet, rill and gully erosion. Grasses and forbs are established in surface depressions to a limited extent. The area of sites A-6 and A-9 are similar in nearly all respects, but site A-9 has less vegetative cover. A number of active erosion channels have been developed on the hillsides as a result of the heavy rains of this year. Well formed gully systems are not present on most of the area but could appear if the high precipitation trends continue in the future. The dogbane thickets (representing an early seral stage) are present on site A-6 and will accumulate organic matter and should slowly advance plant succession. Soil samples were collected on sites A-2, A-5, and A-6.

2. Range Site: Mountain Stony Loam

Soil: **Pleasant Grove gravelly loam (PGB mapping unit) Site Writeup A-3**

Very deep, well drained, gently sloping Pleasant Grove soils are found in this site. These soils have a surface layer of gravelly loam, a subsoil of very gravelly loam, and substratum of very gravelly loam. Slopes range from 2 to 5 percent. The average annual precipitation is 16 to 20 inches. The effective rooting depth is 60 inches or more.

The potential plant community consists of 65 percent grasses, 10 percent forbs, and 25 percent shrubs.

COMMON PLANT NAME	SYMBOL	PERCENTAGE
BLUEBUNCH WHEATGRASS	AGSP	25
IDAHO FESCUE	FEID	5
ONIONGRASS	MELIC	10
PRAIRIE JUNEGRASS	KOCR	5
OTHER PERENNIAL GRASSES	PPGG	20
ARROWLEAF BALSAMROOT	BASA3	5
OTHER PERENNIAL FORBS	PPFF	5
MOUNTAIN BIG SAGEBRUSH	ARTRV	5
ANTELOPE BITTERBRUSH	PUTR2	10
OTHER SHRUBS	SSSS	10

FAVORABLE YEARS	1750
NORMAL YEARS	1500
UNFAVORABLE YEARS	850

The area of site A-3 is in very poor ecological condition and is holding at that point. Fair to good potential exists for cattle grazing if the area is sprayed to control ragweed and other unpalatable forbs, and proper grazing use is implemented. This treatment would free the palatable grasses present (Kentucky bluegrass, blue wildrye) from undesirable competition.

3. Range Site: Mountain Loam (Shrub)

   Soil: **Yeates Hollow gravelly loam (steep north slope phase) (YBG mapping unit)**

   Site Writeup A-7

Very deep, well drained, steep to very steep Yeates Hollow very gravelly loam soils are found in this site. These soils have a surface layer of very gravelly loam, a subsoil of very gravelly loam, a subsoil of very gravelly clay loam, and substratum of extremely gravelly sandy loam. Slopes range from 15 to 60 percent. The average annual precipitation is 16 to 20 inches. The effective rooting depth is 60 inches or more.

The potential plant community consists of 50 percent grasses, 15 percent forbs, and 35 percent shrubs.

COMMON PLANT NAME	SYMBOL	PERCENTAGE
BASIN WILDRYE	ELC12	5
BEARDED WHEATGRASS	AGSU	10
BLUEBUNCH WHEATGRASS	AGSP	20
OTHER PERENNIAL GRASSES	PPGG	15
SHOWY GOLDENEYE	VIMU	5
OTHER PERENNIAL FORBS	PPFF	10
BIGTOOTH MAPLE	ACGR3	10
GAMBEL OAK	QUGA	10
OTHER SHRUBS	SSSS	20

FAVORABLE YEARS	3200
NORMAL YEARS	2325
UNFAVORABLE YEARS	1600

The area of site A-7 is in fair to poor condition (mostly poor) with an upswing in trend over about half of the site. The return of Douglas fir seedlings and reestablishment of bigtooth maple signals an upward trend in condition. Trend is downward over the rest of the area, probably due to the expansion of gullying systems resulting from high precipitation runoff during 1982-1983. Soil samples were taken for this site.

4. Miscellaneous Land Area: Mine Tailings (MP mapping unit)

Site Writeup A-4

Since site A-4 does not exist in natural potential, a condition rating would be difficult to access. However, the area is improving in trend very slowly, as indicated by the germination of Gambel oak and the establishment of a few perennial grasses. The clumps of oakbrush present on the site are accumulating organic matter, providing a slowly expanding fringe of space for other plant species. Soil samples were taken on this site.

B. Main Experimental Plots - On November 17, 1983, a walk-through survey of plots MEP 1 and MEP 2 was conducted by an HS&E staff member. The general status of the planted/seeded areas was evaluated as to whether growth was present and its condition and relative abundance. Photo documentation of both plots was also made. Exact

TABLE 3

1983 STATUS OF MAIN EXPERIMENTAL PLOT - MEP 1
CARR FORK MINE

Quadrant	Species	General Condition
1-D	European Sage (Artemisia abrotanum)	No apparent growth, some washout
2-E	Common Lilac (Syringa vulgaris)	No apparent growth, some washout
3-F	Chokecherry (Prunus virginiana)	No growth
4-L	Utah Serviceberry (Amelanchier sp.)	- - - -
5-M	Big Sage (Artemisia tridentata)	Data missing
6-N	Rubber Rabbitbrush (Chrysothamnu) nauseosus)	No growth, quadrant primarily washed out
7-O	Antelope Bitterbrush (Purshia tridentata)	No growth, quadrant primarily washed out
8-P	Blue Elderberry (Sambucus cerulea)	No apparent growth, invasion by grasses and forbes
9-Q	Yellow Sweetclover (Melilotus officinale)	Very sparse growth, some washout, some invasion by grasses
10-R	Western Wheatgrass (Agropyron smithii)	Good growth, especially along bottom edge
11-S	Slender Wheatgrass (Agropyron trachycalulum)	Some growth, quadrant mostly washed out
12-T	Bluebunch Wheatgrass (Agropyron spicatum inerme)	Very limited growth
13-U	Crested Wheatgrass (Agropyron desertorum)	Limited growth, some washout but grass checked erosion
14-V	Russian Wildrye (Elymus junceus)	Limited growth, some washout but grass checked erosion
15-A	Ponderosa Pine (Pinus ponderosa	Quadrant washed out - 3 seedlings remain in good condition
-B	Douglas Fir (Pseudotsuga menziesii)	No growth
-C	Russian Olive (Elaeagnus angustisolia)	No growth
-G	Austrian Pine (Pinus nigra)	Quadrat washed out, 2 seedlings remain; both in good condition
16-I	Curleaf Mountain Mahogany (Cercocarpus ledifolius)	No growth, some washout
-H	Rocky Mountain Maple (Acer glabrum)	No growth, some washout
-K	Pinyon Pine (Pinus edulis)	No growth, some washout
-J	Rocky Mountain Juniper (Juniperus scopulorum)	No growth, some washout

TABLE 4

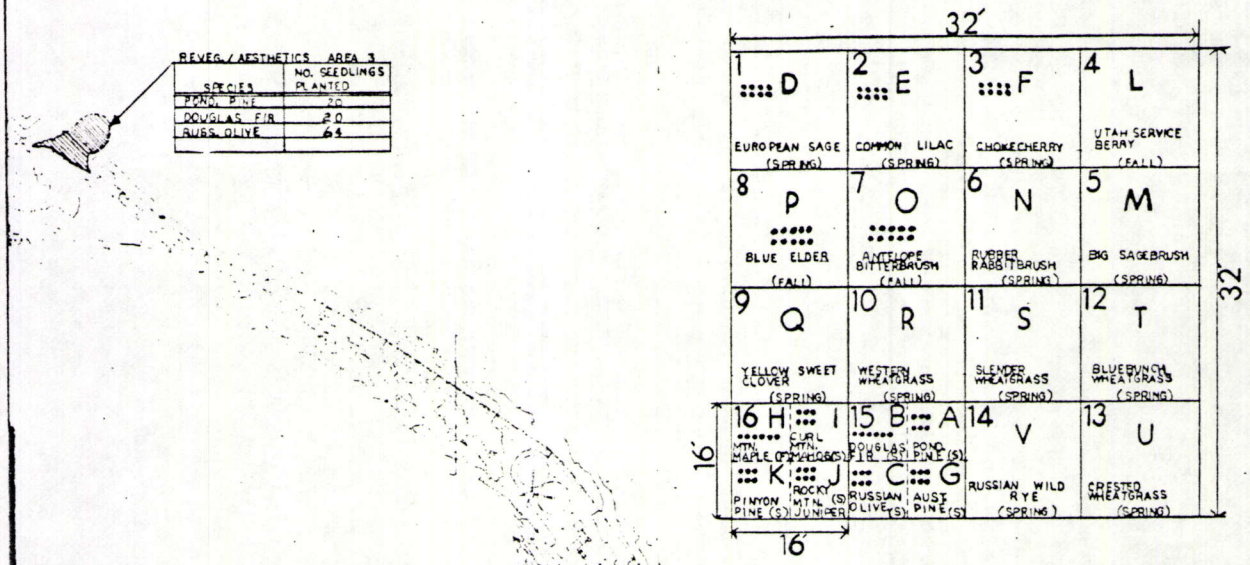
1983 STATUS OF MAIN EXPERIMENTAL PLOT - MEP 2
CARR FORK MINE

Quadrant	Species	General Condition
1-D	European Sage (Artemisia abrotanum)	No growth, all plants dead
2-E	Common Lilac (Syringa vulgaris)	5 plants present, all in very poor condition
3-F	Chokecherry (Prunus virginiana)	No growth
4-L	Utah Serviceberry (Amelanchier sp.)	No growth
5-M	Big Sage (Artemisia tridentata)	No growth, invasion by Russian thistle
6-N	Rubber Rabbitbrush (Chrysothamnu) nauseosus)	No growth
7-O	Antelope Bitterbrush (Purshia tridentata)	No growth, some invasion by Russian thistle
8-P	Blue Elderberry (Sambucus cerulea)	No growth, invasion by Russian thistle
9-Q	Yellow Sweetclover (Melilotus officinale)	Very sparse growth, invasion by Russian thistle and wheatgrass
10-R	Western Wheatgrass (Agropyron smithii)	Sparse growth in fair condition
11-S	Slender Wheatgrass (Agropyron trachycalulum)	Sparse growth in fair condition
12-T	Bluebunch Wheatgrass (Agropyron spicatum inerme)	Very sparse growth but in fair condition
13-U	Crested Wheatgrass (Agropyron desertorum)	Very sparse growth in poor condition
14-V	Russian Wildrye (Elymus junceus)	Sparse, fair growth
15-A	Ponderosa Pine (Pinus ponderosa	8 seedlings present; 3 in good condition, 4 in fair condition, and 1 poor
-B	Douglas Fir (Pseudotsuga menziesii)	No growth
-C	Russian Olive (Elaeagnus angustisolia)	6 plants present in poor condition
-G	Austrian Pine (Pinus nigra)	8 seedlings present - 5 in good condition and 3 in very poor condition
16-I	Curleaf Mountain Mahogany (Cercocarpus ledifolius)	No growth
-H	Rocky Mountain Maple (Acer glabrum)	No growth
-K	Pinyon Pine (Pinus edulis)	No growth
-J	Rocky Mountain Juniper (Juniperus scopulorum)	No growth

M.E.P. #1

REVEG./AESTHETICS AREA 3

SPECIES	NO. SEEDLINGS PLANTED
PONDEROSA PINE	20
DOUGLAS FIR	20
RUSS. OLIVE	64



MILL

WAREHOUSE/SHOPS

REVEG./AESTHETICS AREA 2

SPECIES	NO. SEEDLINGS PLANTED
EUR. SAGE	30
LILAC	15

MINE OFFICE/SHAFT AREA

M.E.P. #1 ELEV. 6600'

REVEG./AESTHETICS AREA 1

SPECIES	NO. SEEDLINGS PLANTED
EUROPEAN SAGE	21
LILAC	13
CHOKECHERRY	26
DOUG FIR	40

KEY

••••	NO. OF FIGURES IS NO. SPECIES PLANTED

THE ANACONDA COMPANY
CARR FORK PROJECT

Drwg. No. FIGURE 2 SH. 1/2

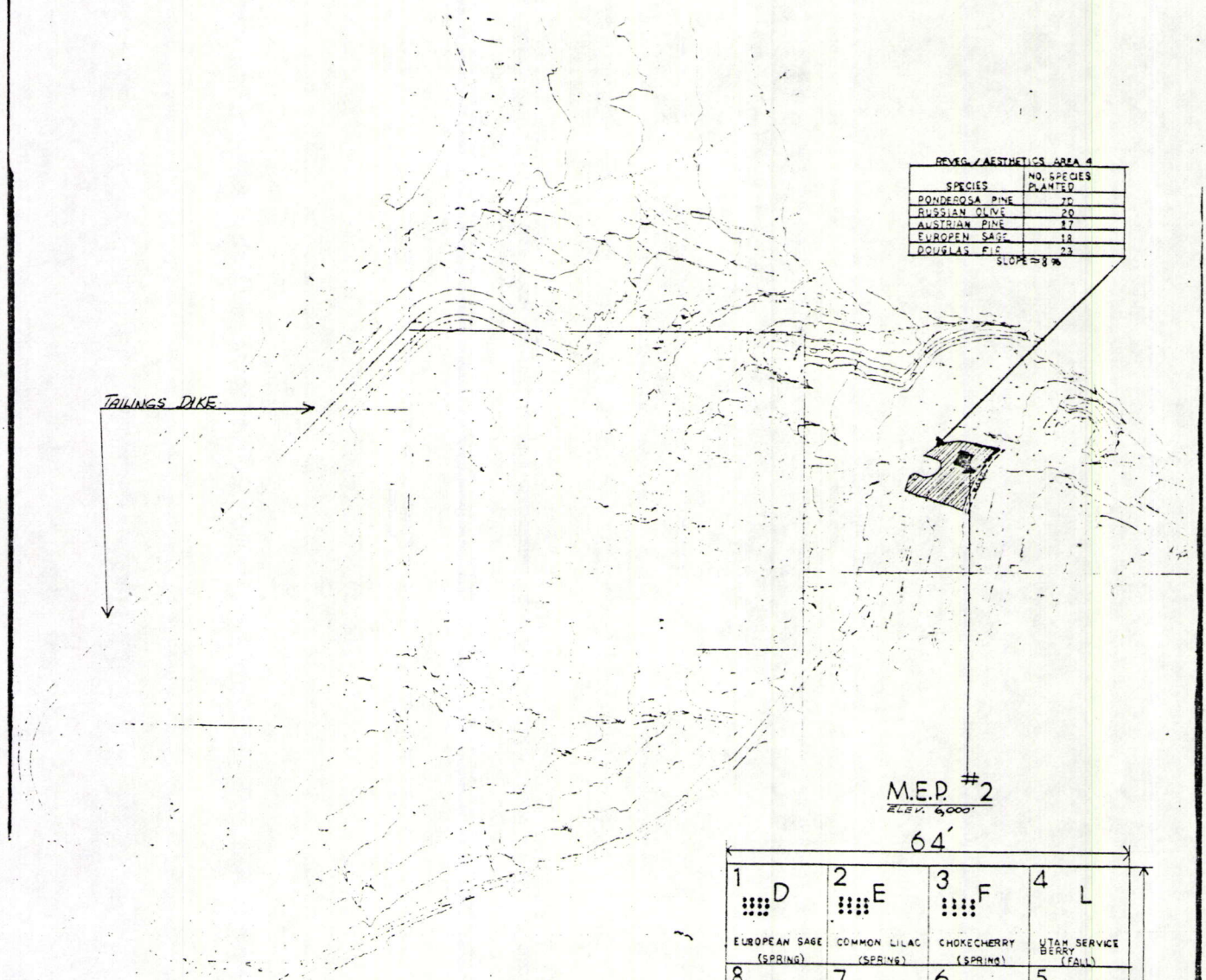
TITLE - GENERAL AREA DWG. W/M.E.P. AND GENERAL AREA LOCATIONS, DETAILS, AND ELEVATIONS.

SCALE-
DRAWN-
CHECKED-
APPROVED-
DATE M D Y

SCALE 1:5000
100 0 100 200 400
CONTOUR INTERVAL 2m
PHOTOGRAPHY DATE OCT. 22 1979

LEGEND
BUILDING
CONC. SLAB & FOUNDATION
CULVERTS & BRIDGE
CONVEYOR
DITCH
DRAIN
FENCE
FLUME
GUARD RAIL
LIGHT POLE
CONC. FOUND.

LEGEND
POWER POLES
PIPELINE
RAILROAD
RAILROAD ABANDONED
RETAINING WALL RET. WALL
ROADS
SCAR ON THE GROUND
TANKS
TRAIL OR TRACK
TREE OR TREE OUTLINE
WATER OR POND



THE ANACONDA COMPANY CARR FORK PROJECT	Drwg. No. FIGURE 3 SH. 2/2	
TITLE – GENERAL AREA DWG. W/ M.E.P. AND GENERAL AREA LOCATIONS, DETAILS AND ELEVATIONS.	SCALE–	
	DRAWN–	
	CHECKED–	
	APPROVED–	
		M D Y DATE

KEY

••••	NO. OF FIGURES IS NO. SPECIE PLANTED S/TSS.

LEGEND

Buildings; Conc. Slab & Foundation (CONC. / FOUND.); Culverts & Bridge; Conveyor; Ditch; Drain; Fence; Flume; Guard Rail; Light Pole

LEGEND

Power Poles; Pipeline; Railroad; Railroad Abandoned; Retaining Wall; Roads; Scar on the Ground; Tanks; Trail or Trace; Tree or Tree Outline; Water or Pond

SCALE 1:5000

CONTOUR INTERVAL 2m

PHOTOGRAPHY DATE OCT. 27, 1979

THE ANACONDA COMPANY

CONTOUR MAP OF THE CARR FORK PROJECT TOOELE COUNTY, UTAH

counts of the condition of all species planted were not performed.

The results of the cursory evaluation of the main experimental plots are summarized in Tables 3 and 4 for MEP 1 and MEP 2 respectfully. As stated previously, plot MEP 1 experienced considerable water erosion through the central portion of the plot; however, the slope held. Figures 2 and 3 indicate the location and plot description.

C. General Aesthetic Areas - Some of the general aesthetic areas were also given a cursory overview on November 17. In aesthetics area #1, the Rocky Mountain Juniper seedlings were in very poor condition and appear to be dying. The Ponderosa Pine and Douglas Fir seedlings appeared to be in good condition and exhibited new growth. A few sage plants were also evident. In aesthetics area #3, a number of the Rocky Mountain Juniper seedings appear to be dead or dying.

III. Conclusions

There is very little variance in the ecological conditions of the different range sites as determined by the SCS survey. Two sites were found to be in fair condition and seven in poor condition. However, some differences in apparent trend

in conditions were shown. The above average precipitation and resultant flooding of 1983 produced declining trends at a number of the sites. These rains established active erosion channels and rill and gulley erosion on the hillsides. Considerable work has been conducted on the mine site to restore proper drainage and repair flood damage.

The vegetation survey and the evaluation of the experimental plots indicate a number of grass and shrub/tree species suitable for future, long-term reclamation. Kentucky bluegrass is becoming a dominant plant species particularly at range site A-8. This species may be considered for future seed mixes, especially for rapid establishment of plant cover. Gambel oak is a shrub which shows promise for addition to seedling plantings. Gambel oak is beginning to invade the tailings area in spite of the adverse conditions. The replacement of the Rocky Mountain Juniper with Utah Juniper was suggested by the SCS and will be given consideration in future plantings.

The experimental plots indicate that Western and Slender Wheatgrasses have a good potential for revegetation purposes and that Crested and Bluebunch Wheatgrasses show fair to moderate promise. Ponderosa Pine and Austrian Pine appear to be the only tree species which have survived from the 1981 planting of the MEP plots. Russian olive is present at the MEP 2 plot but is doing poorly.

As has been reported in previous years, grasshopper infestations have had a significant impact over much of the mine site area. Wildlife grazing, especially field mice and some deer, have also contributed to some degradation of the study plots. However, in 1983 the major impact to the site was the result of the heavy runoff.

UT-RANGE-2
Rev. 10/82

RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. Anaconda 1 of 9

Site Name MTN Gr Lo (Oak) Ranch Anaconda
Soil Taxonomic Unit Yeates Hollow var. E (YAD) Profile No.
Elevation 6040 Exposure N Vegetative Aspect PPGG
Field Office Tooele
Location: T. 3S R. 3W Sec. 20 1/4 NW 1/4 SE
Range Conservationist: Ferguson Trickler Date: 9-6-83

(1) Plant Group	(2) Symbol or Common Plant Names	Wind Eros lb/Ac ←	(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	POPR	600.0 299.0	46	5		
	BRMA4	71.0 65.0	10	10		
	POSE	73.0 52.0	4	2		
	HEKI	0 0	T	—		
% 64						
Forbs or Wl	AMPS	52.0 52.0	8	0		
	TRDU	0 0	T	0		
	ASSP	20.0 20.0	3	0		
	MELA2	7.0 7.0	1	0		
	SOCA6	0 0	T	0		
	WYAM	39.0 39.0	6	0		
	RUCR	0 0	T	0		
	HEAN3	20.0 20.0	3	0		
	MEAL2	20.0 20.0	3	0		
	SAKA	7.0 7.0	1	0		
	APSI	52.0 52.0	8	0		
	PPFF	7.0 7.0	1	1		
% 34						
Trees and Shrubs	QUGA	8.0 13.0	2	2		
	ACNE2	0 0	T	—		
	HC_GR3	0 0	T	—		
	(Residue)	650.0				
		1626.0				
% 2						
	TOTAL		100	20		

Total Annual Yield 650 lbs/Ac. air-dry
(Understory if woodland)

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active	1/2 to 3/4	75-51	Good (Late seral)
50-26	Moderately Active	1/4 to 1/2	50-26	Fair (Mid seral) *
25-0	Severely Active	0 to 1/4	25-0	Poor (Early seral)

TREND INDICATORS:

Plant Vigor: POPR, BRMA4, fair-good
Seedlings and young plants: Present
Litter and mulch: inadequate
Condition of soil surface: Where barren - rocky, crusty
Apparent Trend: Improving Declining Static

* doing better than cond. quic allows.

EROSION COMPUTATION DATA

Bare Ground 37 %
Surface Fragments 35 % = 100%
Ground Cover 18 %
(Litter and vegetation within 1 inch of soil surface)

Height of canopy: 0 0.5m 2m 4m
Canopy Cover: 0 25% 50% 75%
Slope 13 % Slope Length 100 ft.

R 25 (40) K .17 LS 2.04 (4.0) C .325 (.20) T 1 (.10)

Wind Erosion Data: Climate .20 Soil WEG 8
Unsheltered distance 3.58 Veg. Cover 1626.0

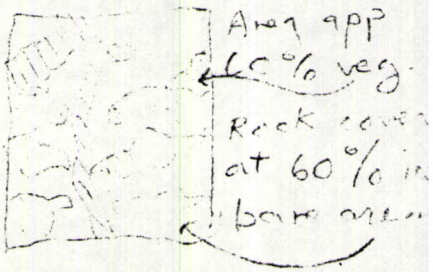
Soil Loss (sheet and rill) 2.82 tons/acre/year
Soil Loss (gully erosion) 3.4 tons/acre/year
Soil Loss (wind) 0 tons/acre/year

USE DATA

Use History: Near smelter, mine
Kind of Animal: C
Season of Use: —
Burning History: —

Present Utilization 5 % of POPR (key species)
Estimated Utilization Efficiency: 10 %

Notes:
Clipped
500 lb
POPR
BRMA2
150 others
650 lbs



Oakbrush stands 4-5 yrs old

UT-RANGE-2
Rev. 10/82

RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. Aracanda #2 of 9

N. of old smelter

Site Name Mtn Gr Lo (Oak) Ranch Anaconda
Soil Taxonomic Unit Yeates Hollow gr. (eroded phase) YAD Profile No.
Elevation 5600 Exposure WNW Vegetative Aspect Barren
Field Office Tooele SD Location: T. 3S R. 3W Sec. 19 ~~Quarter~~ 1/4 NE
Range Conservationist: Ferguson Trickler Date: 9-6-83

(1) Plant Group	(2) Symbol or Common Plant Names	Wind Eros lb/Ac ←		(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	HOJU	87.0	62.0	31	0		
	BRTE	8.0	4.0	2	50		
	POPR	28.0	20.0	10	5		
	AGIN2	0	0	T	1		
	GRSQ	30.0	30.0	15	0		
Forbs or W	MELA2	10.0	10.0	5	0		
	RUCR	2.0	2.0	1	0		
	HEAN3	4.0	4.0	2	0		
	SPCA6	2.0	2.0	1	0		
	DEHO	2.0	2.0	1	0		
	VETH	4.0	4.0	2	0		
	SAKA	10.0	10.0	5	0		
	APSI	30.0	30.0	15	0		
	LASE	10.0	10.0	5	0		
	MEAL2	10.0	10.0	5	0		
	CHNA2	0	0	T	—		
	(Residue)	25.0					
		262.0					
Trees and Shrubs							
	TOTAL			100	5		

Total Annual Yield 100 lbs/Ac. air-dry
(Understory if woodland)

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active *	1/2 to 3/4	75-51	Good (Late seral)
50-26	Moderately Active	1/4 to 1/2	50-26	Fair (Mid seral)
25-0	Severely Active	0 to 1/4	25-0	Poor (Early seral)

TREND INDICATORS:

Plant Vigor:

Seedlings and young plants:

Litter and mulch:

Condition of soil surface: Erosion pavement *

Apparent Trend: Improving **Declining** Static

EROSION COMPUTATION DATA

Bare Ground 12 %
Surface Fragments 85 % = 100%
Ground Cover 3 %
(Litter and vegetation within 1 inch of soil surface)

Height of canopy: 0 0.5m 2m 4m
Canopy Cover: 0 25% 50% 75%
Slope 4 % → 29.0 (6.64) Slope Length 200 ft. (70)
50 10
R 25 K .17 LS 1.40 C .45 T 1
5.64
Wind Erosion Data: Climate .20 Soil WEG 8
Unsheltered distance 1320 Veg. Cover 262.0

Soil Loss (sheet and rill) 12.7 tons/acre/year
Soil Loss (gully erosion) tons/acre/year
Soil Loss (wind) 0 tons/acre/year

USE DATA

Use History: Near smelter
Kind of Animal: C,D
Season of Use:
Burning History: —

Present Utilization T % of HOJU (key species)
Estimated Utilization Efficiency: 10 %

Notes:
* All fine soils are gone leaving a gravel pavement.
All veg. in depressions & water catchment areas
Soil pH - beyond test of 6.0

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RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. ANACONDA 30'9

Alluvial Bottom

Site Name MTN Stony Loam Ranch Anaconda
Soil Taxonomic Unit Pleasant Grove-Rsk (PGB) Profile No.
Elevation 5560 Exposure W Vegetative Aspect PPFE, PPGG
Field Office Tooele SO Location: T. 3S R. 3W Sec. 19 1/4 SE 1/4 NE
Range Conservationist: Ferguson/Trickler Date: 9-6-83

(1) Plant Group	(2) Symbol or Common Plant Names	Wind Eros lb/Ac	(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	POPR	740.0 370.0	37	2		
	BRTE	300.0 150.0	15	0		
	ELGL	156.0 50.0	5	0		
	AGEL3	0 0	T	0		
85						
Forbs or	AMPS	500.0 300.0	30	0		
	VETH	10.0 10.0	1	0		
	GRSQ	10.0 10.0	1	0		
	HEAN3	0 0	T	0		
	CIRSI	0 0	T	0		
	RUCR	10.0 10.0	1	0		
	TRDU	0 0	T	0		
	APSI	100.0 100.0	10	2		
	QUHO	0 0	T	0		
	EPIL2	0 0	T	0		
	MEAL2	0 0	T	0		
13						
Trees and Shrubs	SAEA10	0 0	T	0		
	QUGA (Rootsuc)	0 0 1000.0	T	0		
T						
	TOTAL		100	4		

Total Annual Yield 1000 lbs/Ac. air-dry
(Understory if woodland)

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active	1/2 to 3/4	75-51	Good (Late seral)
50-26	Moderately Active	1/4 to 1/2	50-26	Fair (Mid seral)
25-0	Severely Active.	0 to 1/4	25-0	Poor (Early seral)

TREND INDICATORS:

Plant Vigor: Poor - Fair - POPR
Seedlings and young plants: Annual grasses & forbs
Litter and mulch: Adequate
Condition of soil surface: Rocky
Apparent Trend: Improving Declining (Static)

EROSION COMPUTATION DATA

Bare Ground 5 %
Surface Fragments 63 %
Ground Cover 32 % = 100%
(Litter and vegetation within 1 inch of soil surface)

Height of canopy (0) 0.5m 2m 4m
Canopy Cover: (0) 25% 50% 75%
Slope 9 % Slope Length 180 ft.

R 23 K .17 LS 1.59 C .125 T 1

Wind Erosion Data: Climate .20 Soil WEG 8
Unsheltered distance 350 Veg. Cover 2826.0

Soil Loss (sheet and rill) .94 tons/acre/year
Soil Loss (gully erosion) 0 tons/acre/year
Soil Loss (wind) 0 tons/acre/year

USE DATA

Use History: Overgraz & -disturbed *
Kind of Animal: C, D
Season of Use: —
Burning History: —

Present Utilization 50 % of PSIDR (key species)
Estimated Utilization Efficiency: 55-60%

Notes: * smaller exhausts (?)
Spray for INC grazing capacity - remove regrowth

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RANGE CONDITION RECORD

Upper Mtn Gr Lo (Oak)

USDA
Soil Conservation Service
Write-up No. Anaconda #4 of 9

Misc land type

Site Name Mine tailings (flotation) Ranch Anaconda
Soil Taxonomic Unit — (MP) Profile No.
Elevation 5400 Exposure NW Vegetative Aspect 5555 - Barren
Field Office Tooele Location: T. 3S R. 3W Sec. 19 1/4 SW 1/4 NW
Range Conservationist: Ferguson Trickler Date: 7-7-82

(1) Plant Group	(2) Symbol or Common Plant Names	Wind Eros 16/Ac ←		(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	POPR	6.0	4.0	2			
	BRTE	0	0	T			
	ELGL	0	0	T			
% 2							
Forbs or We	MELA2	0	0	T			
	VETH	0	0	T			
	DEHO	0	0	T			
	WYAM	2.0	2.0	1			
% 1							
Trees and Shrubs	QUGA			97			
	CELE3	0	0	T			
	(Residue)	64.0					
	(800 x .08)	72.0					
% 97							
TOTAL				100			

Total Annual Yield 200 lbs/Ac. air-dry
(Understory if woodland)

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active	1/2 to 3/4	75-51	Good (Late seral)
50-26	(Moderately Active)	1/4 to 1/2	50-26	Fair (Mid seral)
25-0	Severely Active	(0 to 1/4)	25-0	Poor (Early seral)

TREND INDICATORS:

Plant Vigor: POPR
Seedlings and young plants: POPR, QUGA
Litter and mulch: Inadequate
Condition of soil surface: SL-reflective-harsh-crusting med
Apparent Trend: (Improving) Declining Static

EROSION COMPUTATION DATA

Bare Ground 92 %
Surface Fragments 1 %
Ground Cover 8 % = 100%
(Litter and vegetation within 1 inch of soil surface)

Height of canopy: 0 0.5m (2m) 4m
Canopy Cover: 0 (5) 25% 50% 75%
Slope 12 % Slope Length 160 ft.

R 25 50 K .28 LS 2.28 C .325 10 T 5

Wind Erosion Data: Climate 5.64 1.20 45 Soil WEG 3
Unsheltered distance 2500 Veg. Cover 72.0

Soil Loss (sheet and rill) 5.18 tons/acre/year
Soil Loss (gully erosion) 17.8 tons/acre/year
Soil Loss (wind) 24.0 tons/acre/year

USE DATA

Use History: Tailing dump
Kind of Animal: D
Season of Use: —
Burning History: —

Present Utilization 0 % of QUGA (key species)
Estimated Utilization Efficiency: 35 %

Notes:
Soil 2' down.
Tailing texture a SL
QUGA is able to germina
& grow in this material
POPR will grow in (crust
crust layers dark (brown

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RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. Anaconda #1 of 9

Site Name MN Gravel Pit Loc (Oak) Ranch Anaconda
Soil Taxonomic Unit Yeates Hollow gr & (YAD) Profile No.
Elevation 5400 Exposure W Vegetative Aspect PPFF
Field Office Tooele 4.50 Location: T. 3S R. 3W Sec. 18 Quarter 1/4 SW
Range Conservationist: Ferguson Trickler Date: 9-7-83

(2) Symbol or Common Plant Names	Wind Lbs/Ac		(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
PQPR	51.0	36.0	8	5		
BRTE	18.0	9.0	2	0		
AMPS		90.0	20	0		
ASSP		23.0	5	0		
APST		77.0	17	0		
SRSQ		90.0	20	0		
ISTE		14.0	3	1		
SEHO		23.0	5	0		
LASE		23.0	5	0		
EPIL-X	V	9.0	2	0		
PPFF	590.0	5.0	1	0		
HEAN3	9.0	9.0	2	0		
SAEX		45.0	10	0		
CELE3		0	7	0		
ELAN		0	7	0		
RUGA		0	7	0		
(Residue)	200.0					
	968.0					
TOTAL			100	6		

Total Annual Yield 450 lbs/Ac. air-dry
(Understory if woodland)

Grass-like Plants
Trees and Shrubs

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active	1/2 to 3/4	75-51	Good (Late seral)
50-26	Moderately Active	1/4 to 1/2	50-26	Fair (Mid seral)
25-0	Severely Active	0 to 1/4	25-0	Poor (Early seral)

TREND INDICATORS:

Plant Vigor: Fair (PQPR)
Seedlings and young plants: Numerous AAFF, PPFF
Litter and mulch: Inadequate
Condition of soil surface: Gravelly
Apparent Trend: Improving Declining Static

EROSION COMPUTATION DATA

Bare Ground 15 %
Surface Fragments 65 % = 100%
Ground Cover 20 %
(Litter and vegetation within 1 inch of soil surface)

Height of canopy: 0 0.5m 2m 4m
Canopy Cover: 0 25% 50% 75%
Slope 7 % Slope Length 200 ft.

R 25 K .17 LS 1.18 C .24 T 1
7.32 .45

Wind Erosion Data: Climate .20 Soil WEG 8
Unsheltered distance 2112 Veg. Cover 968.0

Soil Loss (sheet and rill) 1.20 tons/acre/year
Soil Loss (gully erosion) 14.0 tons/acre/year
Soil Loss (wind) 0 tons/acre/year

USE DATA

Use History: Sampler Points
Kind of Animal: Cattle
Season of Use:
Burning History:

Present Utilization 5 % of PQPR (key species)
Estimated Utilization Efficiency: 35 %

Notes:
Severe grasshopper damage.
100 step transect for cover = 20% litter + veg.
Ruffed Grouse (2)

Soil Sample

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RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. Anaconda #6 of 9

Site Name Mtn Gr Lb (Oak) Ranch Anaconda
Soil Taxonomic Unit Yarbus, Hollow Steep phase (HKF) Profile No.
Elevation 5600 Exposure S Vegetative Aspect Barren
Field Office Tooele Location: T. 3S R. 5W Sec. 20 1/4 W 1/4 NE
Range Conservationist: Ferguson/Trickler Date: 9-7-83

(1) Plant Group	(2) Symbol or Common Plant Names	Wind Ero's lb/Ac ←		(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	PSPR	25.0	18.0	9	5		
	BRMI4	12.0	12.0	6	8		
	AGEL3	4.0	4.0	2	0		
	AMPS	40.0	40.0	20	0		
	EPTL8	6.0	6.0	3	0		
	HEAN3	6.0	6.0	3	0		
	LASE	6.0	6.0	3	0		
Forbs or Weeds	ADSI	100.0	100.0	50	0		
	ASSP	0	0	T	0		
	PPFE	2.0	2.0	1	0		
	QUGA	4.0	6.0	3	0		
	ACGR3	0	0	T	0		
	(Residue)	50.0					
		255.0					
Trees and Shrubs							
	TOTAL			100	13		

Total Annual Yield 200 lbs/Ac. air-dry
(Understory if woodland)

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active	1/2 to 3/4	75-51	Good (Late seral)
50-26	Moderately Active	1/4 to 1/2	50-26	Fair (Mid seral)
25-0	Severely Active	0 to 1/4	25-0	Poor (Early seral)

TREND INDICATORS:

Plant Vigor: FAIR
Seedlings and young plants: Some (few)
Litter and mulch: Inadequate
Condition of soil surface: Gravelly, cobbley
Apparent Trend: Improving Declining Static

EROSION COMPUTATION DATA

Bare Ground 6 %
Surface Fragments 84 % = 100%
Ground Cover 10 %
(Litter and vegetation within 1 inch of soil surface)

Height of canopy: 0 0.5m 2m 4m
Canopy Cover: 0 25% 50% 75%
Slope 60 % Slope Length 50 ft.

R 25 (60) K .17 LS 16.28 C .45 T 1

Wind Erosion Data: Climate 20 (16.28) Soil WEG 8
Unsheltered distance 30 Veg. Cover 255.0

Soil Loss (sheet and rill) 31.0 tons/acre/year
Soil Loss (gully erosion) 6.2 ** tons/acre/year
Soil Loss (wind) 0 tons/acre/year

USE DATA

Use History: Smelter fumes *
Kind of Animal: C.D
Season of Use: —
Burning History: —
Present Utilization 0 % of PSPR BRMI4 (key species)
Estimated Utilization Efficiency: 10 %

Notes:
* Presumably toxic fumes removed the life from these steep hillside.
5" grasshoppers 1/2
** 1/5 gully erosion of #7

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(Rev. 3/83)
File: 190-19 On road cut.

RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. Anaconda #7 of 9

"Steep N slope"

Site Name Mtn Lo (Shrub) Ranch Anaconda
Soil Taxonomic Unit Yeates Hollow Steep N slope (YEG) Profile No.
Elevation 5600 Exposure N Vegetative Aspect SSSS
Field Office [illegible] Location: T. 3S R. 3W Sec 20 N 1/4 SE
Range Conservationist: [illegible] Trickler Date: 9-1-83

(1) Plant Group	(2) Symbol or Common Plant Names	Wind Eros lb/Ac		(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	PQPR	1156.0	578.0	33	1		
	HEKI	233.0	175.0	10	0		
	BRTE	420.0	210.0	12	0		
% 55							
Forbs or Weeds	WYAM		70.0	4	2		
	QEHQ		35.0	2	0		
	ABSP		53.0	3	0		
	PPFE		53.0	3	2		
	MELA2		18.0	1	0		
	DECA	0	0	T	0		
	MEAL2		35.0	2	0		
	GRSQ	0	0	T	0		
	URDIP	0	0	T	0		
	SOCA6	0	0	T	0		
	AMPS	0	0	T	0		
	EPI[illegible]	0	0	T	0		
% 13	VETH	0	0	T	0		
		340.0					
Trees and Shrubs	24.5' PSME	0	0	T	0		
	ACGR3	211.0	350.0	20	15		
	[illegible]SA	127.0	210.0	12	12		
	SACA10	0	0	T	0		
	(Residue)	600.0					
		3087.0					
% 32							
	TOTAL			100	32		

Total Annual Yield 1150 lbs/Ac. air-dry
(Understory if woodland)

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active	1/2 to 3/4	75-51	Good (Late seral)
50-26	Moderately Active	1/4 to 1/2	50-26	Fair (Mid seral)
25-0	Severely Active	0 to 1/4	25-0	Poor (Early seral)

* Write up one fair cond. but overall probably best characterized as POOR.

TREND INDICATORS:

Plant Vigor: Good - grasses & trees
Seedlings and young plants: "
Litter and mulch: Inadequate
Condition of soil surface: Grasses - Cryptogams common shade
Apparent Trend: Improving Declining Static

EROSION COMPUTATION DATA

Bare Ground 20 %
Surface Fragments 50 % = 100%
Ground Cover 30 %
(Litter and vegetation within 1 inch of soil surface)
82-83 Storms & gullying

Height of canopy: 0 0.5m 2m 4m
Canopy Cover: 0/15 25% 50% 75%
Slope 70 % 60 Slope Length 45 50 ft.
R 25 K .17 LS 16.28 76.28 C .145 .45 T 1
Wind Erosion Data: Climate 20 Soil WEG 8
Unsheltered distance 30 Veg. Cover 3087.0

Soil Loss (sheet and rill) 10.0 tons/acre/year
Soil Loss (gully erosion) 31.0 tons/acre/year
Soil Loss (wind) 0 tons/acre/year

USE DATA

Use History: Smelter fume damage
Kind of Animal: D.C.
Season of Use: —
Burning History:

Present Utilization T % of PQPR (key species)
Estimated Utilization Efficiency: 5 % Steep

Notes:
PSME 11' tall - look good
Numerous PSME seedlings
& young plants
[illegible]
[illegible]

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RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. Anaconda [illegible] of 9

Site Name Seeded Area
Ranch Anaconda
Soil Taxonomic Unit Yeates Hollow grl (YAD)
Profile No.
Elevation 5920
Exposure W
Vegetative Aspect PPGG
Field Office Tooele SO
Location: T.3S R.3W Sec.20 1/4 NE 1/4 SW
Range Conservationist: Ferguson-Trickler
Date: 9-6-83

(1) Plant Group	(2) Symbol or Common Plant Names	Wind Eros lb/Ac ←		(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	POPR	1329.0	558.0	62			
	AGIN2	466.0	270.0	30			
	BRTE	18.0	9.0	1			
% 93							
Forbs or W	MELA2	9.0	9.0	1			
	AMPS	9.0	9.0	1			
	HEAN3	9.0	9.0	1			
	OEHO	9.0	9.0	1			
	PPFF	9.0	9.0	1			
	VETH	9.0	9.0	1			
	SAKA	9.0	9.0	1			
% 7							
Trees and Shrubs	CELE3	0	0	T			
	VSMEG	0	0	T			
	CHNA2	0	0	T			
	(Residue)	1225.0					
		2101.0					
% T							
	TOTAL			100			

Total Annual Yield 700 lbs/Ac. air-dry
(Understory if woodland)

* Chucker Partridge - 8 -

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	(Slightly Active)	(1/2 to 3/4)	75-51	Good (Late seral)
50-26	Moderately Active	1/4 to 1/2	50-26	Fair (Mid seral)
25-0	Severely Active	0 to 1/4	25-0	Poor (Early seral)

TREND INDICATORS:

Plant Vigor: Good - POPR
Seedlings and young plants: Present
Litter and mulch: inadequate
Condition of soil surface: Gravelly
Apparent Trend: (Improving) Declining Static

EROSION COMPUTATION DATA

Bare Ground 15 %
Surface Fragments 50 % = 100%
Ground Cover 35 %
(Litter and vegetation within 1 inch of soil surface)

Height of canopy: (0) 0.5m 2m 4m
Canopy Cover: (0) 25% 50% 75%
Slope 8 % Slope Length 10 ft.

R 25 K .17 LS .31 C .125 T 1

Wind Erosion Data: Climate .20 Soil WEG 8
Unsheltered distance 660 Veg. Cover 2101.0

Soil Loss (sheet and rill) .16 tons/acre/year
Soil Loss (gully erosion) — tons/acre/year
Soil Loss (wind) 0 tons/acre/year

USE DATA

Use History: Smelter exhausts
Kind of Animal: C, D, *
Season of Use:
Burning History: —
Present Utilization 5 % of POPR, AGIN2 (key species)
Estimated Utilization Efficiency: 45 %

Notes:
POPR was not seeded - is now dominant. T[illegible] here [illegible] very well, & is recommended for [illegible] of the [illegible] area.

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(Rev. 3/83)
File: 190-19

RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. Anaconda #9 of 9

Site Name: MTN Gr L8 (Oak) Ranch: Anaconda
Soil Taxonomic Unit: [illegible] (HKF) Profile No.
Elevation Exposure: S Vegetative Aspect: Barren
Field Office: Tooele Location: T. 3S R. 3W Sec. 20 1/4 [illegible] 1/4 NW
Range Conservationist: Ferguson Trickler Date: 9-6-83

(1) Plant group	(2) Symbol or Common Plant Names	Wind Eros lb/Ac		(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	POPR	0	0	T			
	AGEL3	0	0	T			
—							
Forbs or Weeds	AMPS	0	0	T			
	EPLL8	0	0	T			
	HEAN3	0	0	T			
	APSI	50.0	50.0	99			
99							
Trees and Shrubs	QUGA	0	0	T			
		50.0					
	Residue	25.0					
		75.0					
T							
	TOTAL			100	0		

Total Annual Yield <50 lbs/Ac. air-dry
(Understory if wooded)

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active	1/2 to 3/4	75-51	Good (Late seral)
50-26	Moderately Active (circled)	1/4 to 1/2	50-26	Fair (Mid seral)
25-0 (circled)	Severely Active	0 to 1/4	25-0 (circled)	Poor (Early seral) (circled)

TREND INDICATORS:

Plant Vigor: Fair - Those present
Seedlings and young plants: few
Litter and mulch: Inadequate
Condition of soil surface:
Apparent Trend: Improving **Declining** (circled) Static

EROSION COMPUTATION DATA

Bare Ground 0 %
Surface Fragments 97 % = 100%
Ground Cover 3 %
(Litter and vegetation within 1 inch of soil surface)

Height of canopy: 0 (circled) 0.5m 2m 4m
Canopy Cover: 0 (circled) 25% 50% 75%
Slope 60 % Slope Length 50 ft.

R 25 K .17 LS 16.28 C .45 T 1
60 50 16.28 .45

Wind Erosion Data: Climate .20 Soil WEG 8
Unsheltered distance 30 Veg. Cover 75.0

Soil Loss (sheet and rill) 31.0 tons/acre/year
Soil Loss (gully erosion) 31.0 tons/acre/year
Soil Loss (wind) 0 tons/acre/year

USE DATA

Use History: *Smelter fume damage
Kind of Animal: C,D
Season of Use: —
Burning History: —

Present Utilization 0 % of APSI (key species)
Estimated Utilization Efficiency: 10 %

Notes:
*Toxic fumes removed veg. in past.

PLANT SPECIES LIST

	Symbol	Common Name	*Plant Character
Grasses	AGEL2	Tall wheatgrass	PIG
	AGIN2	Intermediate wheatgrass	PIG
	BRMA4	Mountain brome	PNG
	BRTE	Cheatgrass	AIG
	ELGL	Blue wildrye	PNG
	HEKI	King's fescue	PNG
	HOJU	Foxtail barley	PNG
	POSE	Sandberg bluegrass	PNG
	POPR	Kentucky bluegrass	PIG
Forbs	AMPS	Western ragweed	PNF
	APSI	Prairie dogbane	PNF
	ASSP	Showy milkweed	PNF
	ASTER	Aster	PNF
	CIRSI	Thistle	BNF
	EPAL	Alpine willowweed	PNF
	GRSQ	Curlycup gumweed	BNF
	HEAN3	Common sunflower	ANF
	LASE	Prickly lettuce	BIF
	MEAL2	White sweetclover	BIF
	MELA2	Smoothstem blazingstar	BNF
	OECA	Tufted eveningprimrose	PNF
	OEHO	Hooker eveningprimrose	BNF
	PPFF	Others, perennial	
	RUCR	Curly dock	PIF
	SAKA	Russian thistle	AIF
	SOCA6	Canada goldenrod	PNF
	TRDU	Yellow salsify	BIF
	URDIP	Stinging nettle	PIF
	VETH	Flannel mullein	BIF
	WYAM	Mulesear dock	PNF
Shrubs & Trees	ACNE2	Boxelder	NT
	ACGR3	Bigtooth maple	NT
	CELE3	Curlleaf mountain-mahogany	NS
	CHNA2	Rubber rabbitbrush	NS
	ELAN	Russian olive	IS
	PSMEG	Inland Douglas-fir	NT
	QUGA	Gambel Oak	NT
	SACA10	Blue elderberry	NS
	SAEX	Coyote willow	NS

*Legend to Plant Character Column

Grasses: AIG - Annual introduced grass
PIG - Perennial introduced grass
PNG - Perennial native grass

Forbs: AIF - Annual introduced forb
ANF - Annual native forb
BIF - Biennial introduced forb
BNF - Biennial native forb
PIF - Perennial introduced forb
PNF - Perennial native forb

Shrubs & Trees: IS - Introduced shrub
NS - Native shrub
NT - Native tree